

REMARKS

A Transmittal of Formal Drawings accompanies this Reply. The drawings as originally filed included some handwritten legends. The lettering has now been formalized in the replacement sheets of drawings. No amendments to the drawings are intended.

Claims 1-9, 11-21 and 23-28 are being prosecuted in this application. Claims 10 and 22 have been withdrawn subject to Applicant's right to file a divisional application or to obtain additional species before termination of proceedings in this Application.

I. REPLY TO REJECTION FOR DOUBLE PATENTING

Claims 1-9, 11-21 and 23-27 were rejected for nonstatutory obvious-type double patenting as unpatentable over U.S. Pat. No. 6,983,836 in view of Harris, U.S. Pat. No. 5,067,928.

A proper terminal disclaimer signed by an officer of the assignee of a 100% interest and a Statement under 37 C.F.R. 3.73(b) proving that interest are submitted herewith along with the necessary fee for the terminal disclaimer.

Withdrawal of this ground of rejection is respectfully requested. It is noted that Adams et al., U.S. Pat. No. 6,983,836, being the parent of the present continuation-in-part, is not a prior art reference on any ground in this application.

II. REPLY TO THE GROUNDS OF REJECTION UNDER 35 U.S.C. 103(a)

Claims 1-9, 12-21 and 23-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 6,318,537) in view of Harris (US 5,067,928) and further in view of Sasadi, U.S. Pat. No. 4,125,195.

Jones et al., U.S. Pat. No. 6,318,537 is not an equivalent of Adams et al., U.S. Pat. No. 6,983,836.

Adams et al., U.S. Pat. No. 6,983,836 was allowed by the same the Examiners also examining Jones et al. U.S. Pat. No. 6,637,576, which is an equivalent to Jones et al., No. 6,318,537. It is thus believed that the concepts in U.S. Pat. No. 6,983,836, as carried forward with improvements in this application are patentable over Jones et al., even in combination with secondary references of Harris and Sasadi.

Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 6,318,537 B1) in view of Harris (US 5,067,928) and further in view of Petri, U.S. Pat. No. 5,830,054.

Claim 1 has now been amended to more positively recite the features of:

1) an input device for transferring inputs from a user to associate the user with a batch of coins being loaded into the machine from the individual receptacle and with coins being dispensed to the individual receptacle having compartments for holding respective denominations; and

2) wherein the controller associates inputs from a plurality of users with cash balances of coins dispensed and received for respective users during their respective work shifts.

The input device is more particularly claimed as a card reader in claim 13, a touch screen in claim 14 and a personal computer in claim 15.

The invention is the first to provide a convenient, easy-to-use cash recycling and cash settlement machine that performs intake from, and output to, multi-compartment receptacles while tracking cash received and dispensed from a plurality of employees over a work shift. Typically such employees might be cashiers. This is discussed at paragraphs 0008-0012 of the specification. This combination is not derivable from the references of Jones et al., Harris, Sasadi and Petri.

To accomplish this, there need to be two processes being performed concurrently, 1) a coin recycling process in which multi-denomination batches are input and dispensed from the machine and 2) an accounting function for reconciling cash inputs and cash dispensing outputs associated with users who are identified through the input device recited in claim 1. It will be shown in the further discussion that this invention is not suggested by the combination of teachings found in the four references of Jones et al., Harris, Sasadi and Petri.

Claims 18 and 26 have now been amended to recite that the coinage can be dispensed and loaded into the machine from the same user receptacle having multiple compartments to provide true recycling from a physical viewpoint at the same time as cash settlement accounting (totaling inputs and outputs of the multi-compartment receptacles) is being carried out.

None of the four references, Jones et al., Harris, Sasadi or Petri, cited in the Office action come close to this type of operation even if all of their disclosed features are combined. It will be shown noted that the Office Action reads Jones et al. broader than its actual disclosure and that Jones et al. is non-enabling as to the controller for its distributors 270.

III. THE CONTENT OF THE PRIOR ART AND THE DIFFERENCES IN THE CLAIMS THEREFROM:

1. Jones et al., U.S. Pat. No. 6,318,537.

Jones et al. discloses multiple embodiments over its 25 sheets of drawings.

The ATM embodiment in Figs. 2 and 10, does not recycle coins from input to the coin dispensing module 36 without manual intervention. The coins are first fed to coin receptacles 40 which may be a cartridge 56 shown in Fig. 5. Although the cartridge 56 can be transferred to the coin dispensing module 36, there is no disclosure of how do this, which allows the inference that this is done manually. Please note that the coins are not in the first instance put into the machine from such a cartridge 56 associated with a user, and there is no recycling using this cartridge 56.

In contrast, the present claim 1 recites coin transfer mechanisms as part of the machine, and claims 18 and 26 recite “electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user.”

Since the Jones et al. ATM most likely includes a manual transfer between modules 40 and 36, (with no other transfer being disclosed) claims 1, 18 and 26 clearly distinguish from the ATM embodiment in Figs. 2 and 10 of Jones et al. by reciting transfer mechanisms in claim 1 and electronic control of these transfer mechanisms in claims 18 and 26.

Jones et al. also discloses a schematic in Fig. 7 for directing coins to one of several receptacles 52, 54, 56. These receptacles are similar to coin bags. They are final destination receptacles. The receptacles 52, 54 and 56 are not receptacles internal to the machine, such as bulk coin storage receptacles or dispensing hoppers for handling batches of coins being input and dispensed.

Jones et al., Figs. 13a, 13b, 13, and Figs. 20, 21 and 22 disclose two respective embodiments of a large casino cash handling machine. (Jones et al., col. 15, lines 36-37.)

Jones et al. shows only a schematic box for the coin processing module 250 in the embodiments in 13a, 13b, 13, and Figs. 20, 21 and 22. Only the exits 254a-254g in the sorting module 250 are shown. . No detailed sorter mechanism or input hopper are shown. It must be concluded that the sorter and intake area are not shown in these figures. Thus, it is not at all clear that the casino cash handling machine provides a suitable intake area for dumping loads of coinage from a user coin receptacle having multiple compartments as claimed in claim 1. It also appears that while the ATM embodiment has an intake area, the ATM machine as disclosed in Jones et al. doesn't have the capacity to handle cash drawers full of coinage because, for example, cartridge 56 is too small. Therefore, it is submitted that Jones et al. does not show a suitable "intake area on the housing configured for receiving batches of unsorted coins which are dumped into the machine by the user from the individual receptacle having compartments for holding respective denominations as recited in claim 1.

Still further, the embodiment in Figs. 20 and 21 is a gravity-fed machine.

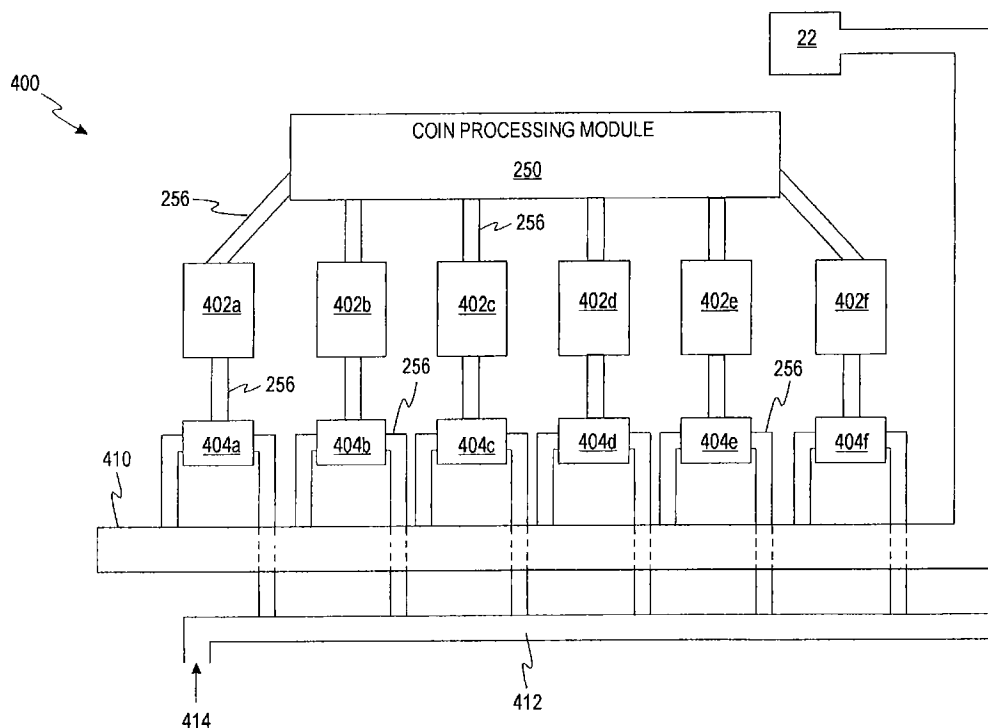


FIG. 20

The associated description in Jones et al., col. 18, line 67 to col. 19, line 7, is as follows:

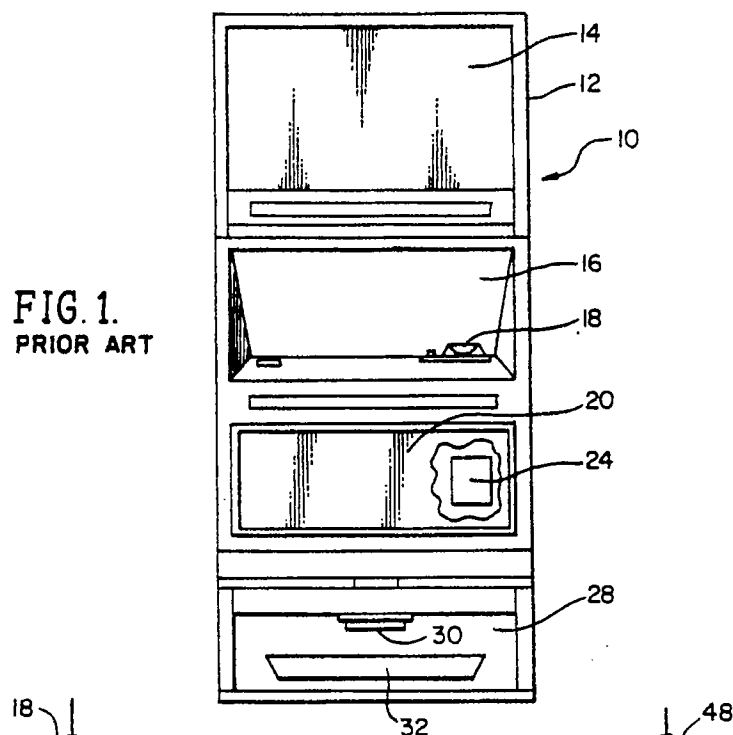
A coin counter 404 is associated with each intermediate coin bin 402. Each coin counter 404 is disposed below each respective intermediate coin bin 402 for counting each coin dispensed from the intermediate coin bin 402. The coin distribution network 400 has two convey paths, a user convey path 410 and a operator convey path 412, which transport coins from the counters 404 to the user and the operator, respectively.

Notice that coins travel by gravity from bins 402 to counters 404 and then by gravity to two convey paths: 1) a user convey path 410 and 2) an operator convey path 412. Also notice that there are only one set of receptacles 402. Thus, Jones et al. is not teaching or suggesting a double set of receptacles for any purpose. Jones et al. teaches that coins can be received and dispensed from one set of receptacles 402.

Figs. 13a, 13b and 13c in Jones et al. also show a gravity-fed machine in which coins are dispensed directly to final receptacles in a position similar to coin bags.

2. Harris, U.S. Pat. No. 5,067,928

Harris illustrates a slot machine in Fig. 1.



Harris, U.S. Pat. No. 5,067,928, Fig. 1.

The Harris patent describes a slot machine because the Harris specification repeatedly mentions tokens and relies on the input “slot “ 18 (Figs. 1, 2) or 48 (Fig. 3) for entry of all coins into the machine 10, which is a characteristic of a “slot machine.” Harris also describes the dispensing hopper and tray 32 as being used for “payouts.” (Harris, col. 5, lines 50.)

The Office Action states that it would be obvious to combine a plurality of the single elevator mechanism 70 of Harris in the gravity-fed machine of Fig. 20 of Jones et al. to provide the subject of claims 1, 18, and 26, provided that Sasadi is added to provide the dispensing spouts. (Office action, page 4 and page 5, first two paragraphs)

In the Office action of January 5, 2007, the Examiner made a restriction requirement to Species 1, a device with lifting mechanism and Species 2, a gravity-fed device as shown in Fig. 10 of the present application and claimed in claims 10 and 22. Claim 10 and 22 and Fig. 10 were essentially withdrawn from the examination. There is a complete inconsistency between the restriction requirement and combining a gravity-fed machine and a non-gravity fed machine in the rejection.

Thus, when the Examiner proceeds to conclude that Jones et al. gravity-fed machine could be modified by the mechanism of Harris to arrive at claims, 1, 18 and 26, Applicant would point to Fig. 10, and says not in the way the Examiner would assume, because Fig. 10 herein provides a completely different construction to incorporate multiple receptacles per denomination in a gravity-fed machine. It would not therefore be obvious to modify Jones et al. to incorporate a device according to Harris because it changes the fundamental operation of the entire machine from a gravity-fed machine to a non-gravity fed machine.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The first reason the combination of Jones et al. and Harris would not be made is the combining of a gravity-fed machine with a non-gravity feed machine of Harris.

The second reason is that Jones et al. is perfectly satisfied with its one set of hoppers 402. Please see Fig. 21, where the immensity of hoppers 402 is illustrated. Jones et al. states at col. 19, lines 8-17 as follows:

The coin distribution network 400 eliminates the aforementioned downtime associated with unloading coins from the currency processing machine 10. The downtime is eliminated because the intermediate coin bins 402 are able to receive coins while dispensing coins to the convey paths 410, 412. The counters 404 only count those coins which are dispensed to the convey paths 410, 412. Accordingly, new coins directed into the intermediate coins bins 402 will not affect the batch values for the coins being dispensed to the convey paths 410, 412.

The third reason that one of ordinary skill in the art would not make the invention from Jones et al. and Harris is that Harris only discloses a single bulk coin receptacle for one denomination (the denomination of the slot machine), it does not provide a multiple denomination solution. It is part of single apparatus that is disclosed as being installable in the slot machine to save refilling.

In response to the comments at page 12, last paragraph, of the Office action, it is concluded that Harris suggests only a single bulk receptacle for handling one denomination or for handling unsorted denominations for the following reasons:

1. Harris Fig. 1 shows what appears to be a slot machine 10 from the drawing and accompanying description.
2. Harris Fig. 2 shows the schematic of the machine mechanisms including a coin entry slot 18, and a coin acceptor/rejector mechanism 22, a diverter 24 and a hopper 26 which are all in the basic coin path 22a, 26a through the machine 10.
3. Harris does not disclose any sorter or any type of electronic control for totaling multiple denominations -- instead it shows a coin slot 48 for manually feeding coins into the elevator device 70.
4. There is no mention of multiple denominations anywhere in the Harris patent.
5. The coin tray 62 in Harris is not disclosed as having compartments for multiple denominations and also accepts rejected coins.

6. The relative size of the retrofit assembly in Harris is such that there would not be room for a plurality of such assemblies in a machine of that size.

7. Neither Harris nor Jones provides an enabling disclosure of electronic control for dispensing to a multiple denomination cash drawer. (See Figs. 11-16 herein.)

As to whether multiples of Harris' mechanism could be included in the very large machine of Jones et al., Jones et al. does not suggest any problem with receiving and dispensing coins from individual receptacles 402 or any motivation for tiering the receptacles 402 with other, non-gravity feed receptacles.

In Jones et al. Figs. 20 and 21, it is ambiguous, at best, as to whether the receptacles 402, in fact, are the bulk coin receptacles or are the dispensing hoppers claimed in claim 1, since there is only one set of receptacles 402 in Jones et al., Figs. 20 and 21. The elements 404 in Fig. 20 are counters, not receptacles. Furthermore, Jones et al. Figs. 20 and 21 is a gravity-fed system, like the system of claims 10 and 22 and Fig. 10 herein, which have been restricted from prosecution in this application. It is not at all apparent to re-design a gravity-fed system of Jones et al. to use a non-gravity-fed device as proposed by Harris. The gravity-fed receptacles 402 of Jones et al. are similar to the receptacles 93 in Fig. 10 herein, which provide an alternative to the skimmer-type receptacle in Harris, rather than something to be combined with the receptacle 70 in Harris. Jones et al., Figs. 13a, 13b and 13c also depict a gravity-fed system. Jones et al. doesn't illustrate or even mention a non-gravity fed system. Jones et al. doesn't illustrate or even mention the possibility of double receptacles per denomination. Harris does not suggest a sorting mechanism feeding multiple elevator assemblies, nor has any other KSR-type *bona fide* engineering method, other than increasing the capacity of the machine, been cited by Examiner for the combination of Jones et al. and Harris in rejection of the claims. (See Examiner's comments last paragraph of page 3, first and third paragraphs of page 4 of the Office action.)

In fact, not only doesn't Harris show an actual sorting mechanism, but the disclosure of the sorting mechanism in Jones et al. is incomplete. Coin processing module 250 in Figs. 13a, 13b and 13c of Jones et al. and in Figs. 20 and 21 is a schematic showing only the exit chute pattern 254a-254f from a sorter that is not shown. There is no actual sorter shown and no intake for a sorter that is shown in Fig 20.

It is further submitted that even the combination of the Jones et al. casino machine and the Harris slot machine does not suggest bulk cash recycling or cash settlement of multiple sorted denominations. Jones et al. only dispenses to large receptacles such as coin bags and coin bins meant to be handled individually. Harris dispenses to a payout tray 32 seen in Fig. 1 above.

Harris is a 1991 patent, which is well before Jones et al. filing date in 1999. Given the extensive disclosures and multiple embodiments in Jones et al. and related patents of the assignee therein, if Jones et al. could have been combined with Harris to provide the machine and method of claims 1, 18 and 26, it would have at least mentioned a cash settlement or cash recycling concept in Jones et al., but Jones et al. was not concerned with this type of recycling machine as described and claimed in this application.

There is no inevitability or predictability of combining Jones et al. and Harris, and even then the two references do not accommodate a cash drawer or provide for dispensing denominations in parallel to one receptacle.

The fourth reason for allowance of claims 1, 18 and 26 is that none of the cited prior art, not Jones et al., not Harris and not Petri shows a mechanism for both receiving and dispensing coins to “an individual receptacle or user coin receptacle having compartments for receiving and holding respective denominations.”

3. Petri, U.S. Pat. No. 5,830,054

Petri is not a recycler for accepting batches from a cash drawer, because a coin caddy 1, which is a different device than the cassette 12, of allowing input of coins into a rail sorter with a canted sorting disk. There is no disclosure in Petri of reconciling batches of coins received from and dispensed to employees. It appears to be a pre-loaded dispensing machine and clearly shows the limitations in the prior art.

Only Petri, cited against claim 11, dispenses to a cash drawer. No slot for receiving a cash drawer is apparent from the drawings and description in Petri and it may well be that cabinet doors are opened to insert and remove the cassette 12. Claim 11 has now been amended to recite that the housing has a cash drawer receiving slot in a front side of the housing that is configured to receive a cash drawer having multiple compartments. Therefore,

reconsideration of the rejection of claim 11 based on Petri and the other cited references is respectfully requested.

The fifth reason that the combined art of Jones et al., Harris and Petri does not make obvious the present invention of claims 1, 18 and 26 is that even in combination, this accumulated art does not suggest a machine for both automatically accepting and dispensing sorted coinage to and from a user coin receptacle while tracking deposits and withdrawals for that user. Furthermore claims 1, 23, 24 and 28 recite that is accomplished over a work shift (cash settlement). It is not assumed in the casino machines of the prior art such as Jones et al. that the persons withdrawing sums are the same persons depositing the cash, there is just a need for identifying some who received the cash.

In regard to the comments in the Office action bridging pages 11 and 12 that Jones et al. provides accounting functions in its machine, the machine of the present invention does the cash intake and dispensing and accounting simultaneously in a convenient way for users with cash drawers (cashiers) who are not skilled in accounting or in machine operations. Cash settlement is the balancing cash received and taken over a work shift, similar to a teller in a bank. Jones et al. may credit a user's account in a bank through an ATM, but this is a different type of accounting, it is simply recording episodic deposits and withdrawals over many days, it is not cash settlement accounting over a work shift. Neither the ATM nor the casino cash handling machine are described with this feature.

If Jones et al. was designed for cash settlement functions for casino employees, Jones et al. would have discussed cash settlement functions further because the assignee of Jones et al. is familiar with cash settlement functions and yet did not discuss it in Jones et al.. Jones et al. is identifying a user that access the cash dispensing machine, in the way that users are always identified when they receive cash.

A sixth reason that claims 18 and 26 are not made obvious is that claims 18 and 26 have been amended to recite the feature of "electronically controlling a plurality of

mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user.”

Jones et al. only discloses at col. 18, lines 47-49, “a suitable controller (not shown) is electrically coupled to the coin chute 270 for rotating the coin chute 270 among the four apertures 276” No drawing is provided. This disclosure is not in compliance with 35 U.S.C. 112, first paragraph. See *Biomedino v. Waters Technologies*, 490 F.3d 946 (Fed. Cir. 2007), where a comparable disclosure of “a controller” was deemed first, not in compliance with 35 U.S.C. 112, first paragraph and therefore, not in compliance with 35 U.S.C. 112, sixth paragraph as supporting a control means element.

By comparison, please refer to Figs. 11-16 herein and accompanying description.

Nor does Harris teach a controller for controlling multiple dispensing hoppers for dispensing to a user coin receptacle for receiving plural denominations.

4. Sasadi, U.S. Pat. No. 4,125,195

Sasadi is a mechanism for filling railroad cars (Abstract, first sentence). It is not disclosed that the four source bins in Sasadi would hold different commodities (See col. 7, lines 38-40). The bins are all processing a single commodity such as dry, powdered rock (See Title).

The Office action commented in the rejection that Sasadi discloses a system of dispensing outlets that are moved automatically by solenoid valves and mechanical linkages. (Page 5, first paragraph of the Office action.)

The Office action goes on to state that it would have been obvious to combine Jones et al. with Sasadi to accommodate a coin receptacle with a plurality of coin compartments for multiple denominations. (Page 5, second paragraph of the Office action.)

IV. LIMITED APPLICABILITY OF THE SASADI REFERENCE:

It is isn't the subject of dispensing dry rock that makes Sasadi a non-analogous reference, it is the limited relevance of its disclosed operation in dispensing rock to the operation of recycling coins as claimed herein.

The first reason is that Sasadi would not be combined with Jones et al. and Harris is that Sasadi in not dispensing anything like plural denominations, it is all one commodity, dry powdered rock. The purposed of the plurality of bins and spouts in Sasadi is simply to fill up a box car faster. Sasadi relates to moving its movable spouts to a new configuration, which it explains is set up usually for one type or railroad car at a time (Sasadi, col. 9, lines 9-24).

Second, there is no recycling in Sasadi in the sense of providing a machine or method for receiving and dispensing the material from and to the same multi-compartment receptacle (the railroad boxcar). It does not unload boxcars with its moveable spouts. One or ordinary skill in the art cannot unload the boxcars in Sasadi with the Sasadi machine, for recycling purposes.

Therefore, it is highly unlikely that this art would be consulted by someone designing coin equipment the size of an office machine for servicing a user coin receptacle. It is more likely that they would look at Jones et al. and not find a solution to the problem.

V. A *PRIMA FACIE* CASE HAS NOT BEEN MADE OUT FOR FINDING ALL OF THE LIMITATIONS IN THE CLAIMS IN THE COMBINED REFERENCES:

After KSR, it is still the law that all claim limitations must be taught or suggested. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)."

In response to the Examiner's comment that the claims are obvious in view of *Ex parte Smith* (see Office action for citation) without a specific teaching, the undersigned has examined the case and finds that it does not stand for the proposition advanced in the Office action, that no comparable teaching is required to support a finding of obviousness of a material claim limitation. The Board panel quoted the following in regard to KSR:

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR*, 127 S.Ct. 1727, 1739, 82 USPQ2d 1385, 1395 (2007).

The “known methods” in KSR were provided the testimony of an expert about methods used in the industry. Such a teaching would equate to a public use under 35 U.S.C. 102(b) or known prior art under 35 U.S.C. 102(a). But the Examiner’s statements about the parts of the references being combinable to reach limitations in the claims that are not literally disclosed in references goes far beyond *Ex parte Smith* and KSR.

Also, while the Examiner may possess expertise, the Examiner is not a testifying as an expert witness in the manner of the KSR expert witness to add to the factual content of the record.

The *Ex parte Smith* decision was based on the “substitution” rule:

The substitution of the continuous, two-ply seam of Dick for the folded seam of Wyant thus is no more than “the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.” *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. (Our emphasis.)

The current rejections are not based on “simple substitution” rule because the Examiner cannot find any reference in which there is a “simple substitution” to complete the claimed subject matter.

Despite the analogies made in the Office action, none of the cited prior art literally shows any of the subparagraphs of claim 1 except for the housing and coin sorter. None of the subparagraphs literally read on any of the elements in the cited art.

None of the cited prior art shows recycling to the same user coin receptacle having multiple denominations, and electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user (claims 18 and 26).

None of the prior art, not even Jones et al. discloses that the controller associates inputs from a plurality of users with cash balances of coins dispensed and received for respective users during their respective work shifts. (Claims 1, 23, 24, 28).

None of the prior art literally shows double-tiered receptacles (Claims 1, 18 and 26) for simultaneously receiving and dispensing a plurality of denominations (Claims 19 and 27) (Note: the prior art either doesn’t have multiple denominations or doesn’t have two tiers of receptacles.)

VII. IT WOULD NOT BE OBVIOUS TO ONE OF ORDINARY SKILL IN THE ART TO COMBINE THE FOUR REFERENCES OF RECORD IN THE MANNER DESCRIBED IN THE OFFICE ACTION.

The Office action is focused on finding and then adjusting the mechanical components of the present claimed invention to find correspondence in the four pieces of the prior art, but there is no suggestion of an engineering method for supporting the combination of all of the parts necessary to provide a convenient cash recycling machine for bank and retail employees managing cash drawers. The Office action repeatedly refers to the motivation or goal of increasing the supply of coins so as to lessen downtime in the machine. That is insufficient as a “known method” to provide the cash recycling and cash settlement machine and methods claimed herein. The invention provides a machine and methods for recycling large amounts of cash to cashiers. It is not assumed that there will be any “downtime,” as it is a machine accessed during the day by employees. Employees typically receive cash at the beginning of their shift, and return during their shift for more cash and then return cash at the end of their work shift.

The motivation of lessening the need to re-fill a coin dispensing hopper as stated in the present Office action doesn't provide the motivation to build the machine of claim 1 or to practice the methods of claims 18 and 26. Applicants are providing a fully operational machine and method for handling a plurality of cash drawers from a plurality of employees starting, ending and during their work shifts.

Jones et al. on the other hand is collecting coinage in bins to be transported to other locations in a casino or loaded into slot machines using other types of devices.

Harris is, in fact, trying to reduce servicing of a slot machine but does not disclose or discuss multiple denominations or identifying specific users with the money.

Sasadi is trying to protect workers from the handling of certain mineral materials – there is no disclosure of handling other than a single material despite the many bins and feed paths in Sasadi.

Petri is trying to dispense cash, but does not have a simple intake solution for cash returned in cash drawers returned to the machine.

In none of these references is there "a coin recycling machine for (efficiently) receiving coins, for sorting coins into a plurality of denominations and for automatically dispensing coins as a plurality of sorted denominations to an individual receptacle associated with a respective user and having compartments for receiving and holding respective denominations," as recited in amended claim 1.

VIII. REMARKS CONCERNING THE DEPENDENT CLAIM REJECTIONS

Claims 2 and 3:

The Examiner cites Fig. 7 of Jones et al. and col. 7, lines 8-22 and 34-38.

This passage from Jones et al. does not relate to the issue of the double receptacles per denomination in addition to any destination receptacle as recited in claims 1, 2 and 3.

Fig. 7 of Jones et al. shows only final destination coin receptacles such as coin bags 50. There are no bulk receiving receptacles or dispensing hoppers internal to the machine illustrated in Fig. 7.

In contrast, claims 1, 2 and 3 are talking about other types of coin receptacles which are internal to the claimed machine and are upstream from any destination receptacles. The coin bags 50 and other receptacles 54, 56 in the position of the coin tray in the present application and not to either the bulk coin receptacles or the dispensing hoppers internal to the machine. There are no bulk coin receptacles or the dispensing hoppers shown in Fig. 7 of Jones et al. that are relevant to the recitations in claim 2 or claim 3.

Claims 4 and 5:

Claim 4 recites wherein each of the bulk coin storage receptacles has a capacity at least three times the capacity of one of the dispensing hoppers.

Claim 5 recites wherein each of the bulk coin storage receptacles has a capacity at least ten times the capacity of one of the dispensing hoppers. None of the art suggests this ratio, which is necessary to really handle large quantities of coinage in a recycling machine.

Looking at Jones et al., Fig. 20 and Harris, and assuming that they could be combined in some way, they provide about a 1:1 ratio between hoppers 402 in Jones et al., Fig. 21, and

the elevator 70 in Harris. The elevator 70 also provides about the same capacity as the single hopper 56 in Figs. 2 and 3 of Harris itself, which is consistent with the fact that coins must be hand fed into the assembly in Harris without the aid of a sorter. There is nothing to suggest a 3:1 ratio as in claim 4 or a 10:1 ratio as in claim 5, because the purposes of the machine are entirely different from the present invention aside from the simplistic goal of provided some form of extra capacity. This relative sizing is nowhere discussed in the cited prior art.

In regard to the Examiner's comment that col. 15, lines 33-41 sets forth a rationale for determining various features, such as the features of claims 4 and 5 (see Office action 5, second last paragraph), as obvious in view of the Jones et al.' disclosure, it is noted that this passage is simply talking about the capability of Jones et al.' machine in handling other coins sets such as Euros and other denominations and is not discussing the cash recycling features resulting from the claimed invention.

Claims 6, 19 and 27:

These claims were rejected on Jones et al., col. 19, lines 7-25, which states that coins can be input and output simultaneously because the counters on the input are on the sorter 250 and the counters 404 on the output are below the receptacles 402.

Nevertheless, Jones et al. only provides one set of receptacles 402, so coins would be flowing in and out of receptacles 402 at the same time, possibly causing jamming, whereas in the present invention coins are received in one receptacle but dispensed from a second receptacle in a non-interfering mode of operation during these types of operations.

Claims 18 and 26:

This non-interfering mode is probably best illustrated by independent claims 18 and 26, from which claims 19 and 27 depend, and which set forth the three coin transferring operations of:

dispensing coins by denomination from a plurality of dispensing hoppers in a machine and totaling amounts dispensed in relation to respective users;

loading batches of coins having a plurality of denominations into the machine and totaling amounts of the batches of coins in relation to respective users;

receiving the coins that are fed into the machine and sorting said coins by

denomination, counting said coins and directing said coins to a plurality of bulk coin storage receptacles according to denomination;

electronically controlling a plurality of mechanisms that transfer coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers for dispensing to a respective user; and

comparing amounts of coins dispensed from the machine for a respective user with amounts of coins loaded into the machine by said respective user.

The invention of claims 18 and 26 combines: 1) loading batches of coins having a plurality of denominations into a machine; 2) dispensing coins from a from a plurality of dispensing hoppers in the machine; and 3) transferring coins from said bulk coin storage receptacles by denomination to corresponding ones of said dispensing hoppers.

Because the loading and dispensing operations are separated by the transferring operation, the simultaneous or concurrent operation claimed later in claim 19 in loading and dispensing operations is facilitated over Jones et al. which shows only one set of receptacles. In addition, Jones et al. Fig. 20 remixes the denominations or dispenses only one denomination at time through a common user convey path 410 and a common operator convey path 412. Jones et al. is also similar to Adams '836 in not separating input and output operations with respect to two receptacles per denomination per claims 19 and 27.

Harris is more concerned with increasing the supply of token and coins than in any interference between receiving and dispensing large amounts of coin. In Harris, the amount of coins being input is restricted by availability of only a coin slot 48.

The claimed invention is advantageous over Harris which does not disclose a sorter directing coins to a plurality of elevator type receptacles according to denomination. Harris' acceptance of coins fed into a slot is not comparable to sorting coins into a plurality of bulk coin storage receptacles on the input side of the machine operation. Based on reading the two references, the incorporation of the Harris device in the Jones et al. machine is not at all obvious or predictable and does come close to providing the limitations of the claims.

Claims 7 and 20:

Applicant acknowledges that bag switching diverters between two bags have been well known in the art, and nothing beyond such common types of diverters is claimed in this application (See element 94 in Fig. 10 for example).

Claims 12, 13, 20 and 24:

The Office Action cites Jones et al., col. 5, lines 25-37 and col. 1, lines 20-27, col. 2, lines 20-24 and col. 5 lines 23-24, which are reproduced below as follows:

Col. 5, lines 25-37:

The currency processing machine 10 may also include a media reader slot 24 into which the user inserts his or her identification card so that the currency processing machine 10 can identify the user. The touch screen 12 typically provides the user with a menu of options which prompts the user to carry out a series of actions for identifying the user 30 by displaying certain commands and requesting that the user depress touch keys on the touch screen 12 (e.g. a user PIN). The currency processing machine 10 has a media reader device which is capable of reading from or writing to one or more types of media. This media may include various types 35 of memory storage technology such as magnetic storage, solid state memory devices, and optical devices.

Col. 1, lines 20-27:

The currency processing machine may be a redemption type of machine wherein, after the deposited coins and/or bank notes are counted, funds are returned to the user in a pre-selected manner determined by the user, or to a card which stores electronic money, such as a smartcard. Alternatively, the machine may be a simple deposit type of machine where funds which have been deposited by the user are credited to his or her account.

Col. 2, lines 10-24:

After determining the amount of the deposited coins, the currency processing machine typically provides a way for the user to convert the deposited coins into alternative funds available to the user. For example, the deposited amount of coins may be converted into bank notes. Or, the user may such as a smartcard, and the currency processing system places a credit on the inserted card. Further, the currency processing machine may convert the deposited amount as a credit to the user's specific account which is accessible by the currency processing machine. The currency processing machine may also have the capability of receiving and counting bank notes and provide for the same types of conversion of bank notes as described with respect to the depositing of coins.

Col. 5, lines 23-24:

Alternatively, the currency processing machine 10 can credit a user's account.

Col. 19, lines 20-21:

Appropriate value totals are maintained for the coins transported to the operator.

The above passages are describing an ATM machine (PIN number), a deposit machine and a self-service machine where a voucher is dispensed for an input of coinage. What is missing in all of these citations in the Office action is any suggestion of "cash recycling," or "cash settlement," which is the reconciling of amounts input and received by a user over a work shift.

In regard to the comments in the Office action bridging pages 11 and 12 that Jones et al. provides accounting functions in its machine, the machine of the present invention does the cash intake and dispensing and accounting simultaneously in a convenient way for users with cash drawers (cashiers) who are not skilled in accounting or in machine operations. If Jones et al. was designed to this purpose, Jones et al. would have discussed it further because the assignee of Jones et al. is familiar with cash settlement functions and yet did not discuss it in Jones et al.. The general statement at col. 15, lines 33-41, cited by the Examiner, relates to foreign coin sets.

In response to the comment in the Office action that Applicant's representative is arguing against the references individually, this is not the case. It is apparent that the references when taken as a whole do not suggest the claimed subject matter as a whole in each respective claim. It also believed that a *prima facie* case of finding all limitations in the references has not been made out for the amended claims, because the teaching of the references have been extended beyond their meaning as in the case of col. 15, lines 33-41. Nor has a mere substitution been made out in the Office actions for the pending claims or the amended claims.

Claims 12, 13, 14, 15 and 24 have been amended to recite that the cash balances of coins dispensed and received for respective users during a work shift or during their respective work shifts. Support is found at paragraph 0012 under the Heading "Summary of the Invention," and is illustrated in Fig. 13 and described in the accompanying description at para. 0051.

In addition, new claim 28 has been added to provide a parallel to claim 24, but depending from claim 26.

In addition, new claim 29 has been added to combine claims 12 and 13 into one claim depending from claim 1.

The remaining claims all depend directly or indirectly from claims discussed above and are seen as allowable for at least the same reasons.

CONCLUSION

In view of the Amendment and Remarks, reconsideration of the application is respectfully requested. After the Amendment, claims 1-9, 12-21 and 23-29 are still pending, and a Notice of Allowance is earnestly solicited for these claims.

Respectfully submitted,

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